



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/708,019	02/03/2004	Gerry Amer	103103	2018

7590
Dr Floyd E Roberts
125 126th ave
Treasure Island, FL 33706

04/04/2007

EXAMINER

LUKS, JEREMY AUSTIN

ART UNIT	PAPER NUMBER
----------	--------------

2837

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/708,019

Applicant(s)

ARNER, GERRY

Examiner

Jeremy Luks

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 16-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>2/3/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4 and 7-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chacko (6,686,033) in view of Theil (6,747,773). Chacko teaches a sound attenuation material which comprises; a resin based lattice structure (Col. 2, Lines 47-60); said structure further chemically or mechanically retaining a plurality of mechanisms for altering, attenuating, reflecting, or absorbing sound (Col. 5, Line 51 – Col. 6, Line 19); further comprising projection surface mechanisms, for projecting acoustical waves towards absorbing or attenuating means (Col. 3, Lines 19-51); further said mechanisms being retained by said lattice projection structure material further comprising absorber or attenuation means; wherein said absorber means comprises material as claimed ceramic in claim 1 where said absorber means comprises ceramic microspheres (Col. 3, Line 63 – Col. 4, Line 14); wherein said material additionally comprises crack propagation resistance means (Col. 3, Lines 32-34). Official notice is take that the filler materials attached to the lattice in Col. 3, Lines 19-25 used for crack propagation and absorption/reflection are well known to be thermally and electrically conductive; and where said crack propagation resistance means consists of fibrous reinforcement; said fibrous reinforcement also possessing sound attenuation

Art Unit: 2837

properties (Col. 3, Lines 19-34). Official notice is taken that talc in a fibrous form is well known. Further, it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. Chacko fails to teach wherein said lattice structure comprises a substantially continuous framework; said framework having vacant and non vacant cavities; a stub tuning apparatus where such stub tuners are extended into vacant areas defined within said lattice; said stub tuners further being non uniform in extended length; and where said stub tuner means are composed of ceramic particles having a high aspect ratio in at least two of three dimensions such as rods or plates. Theil teaches a lattice structure (Figure 2, #110) comprising a substantially continuous framework; said framework having vacant and non vacant cavities (245); a stub tuning apparatus (111) where such stub tuners are extended into vacant areas (245) defined within said lattice (110). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Chacko, with the apparatus of Theil to controllably tune the cavities. It would have been an obvious design choice to provide said stub tuners being non uniform in extended length, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). Further, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8. However, it would have been obvious to one of ordinary skill in the art at the time the invention was

Art Unit: 2837

made to compose stub-tuning means from ceramic particles having a high aspect ratio in at least two of three dimensions such as rods or plates, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416. Further, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or working range involves only routine skill in the art. In re Aller, 105 USPQ 233. Still further, the method of forming a device is not germane to the issue of patentability of the device itself.

2. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chacko (6,686,033) and Theil (6,747,773) as applied to claim 1 above, and further in view of Sperling (3,833,404). Chacko and Theil are relied upon for the reasons and disclosures set forth above. Chacko further teaches projection surfaces composed of a plurality of fillers ceramic particles from a group of clays, talcs, or mica (Col. 3, Lines 19-51). Chacko and Theil fail to teach wherein the filler clays, talcs, or micas are in a platelet form. Sperling teaches using fillers in platelet form (Col. 3, Lines 31-38). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Chacko, with the apparatus of Sperling to enhance dampening characteristics by forming a layer-like cross-section with the platelet fillers.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pertinent arts of record relating to acoustical absorption coatings are disclosed in the PTO-892.

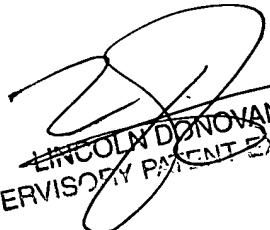
Art Unit: 2837

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy Luks whose telephone number is (571) 272-2707. The examiner can normally be reached on Monday-Thursday 8:30-6:00, and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeremy Luks
Patent Examiner
Art Unit 2837
Class 181


LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER